REMARKS

Claim Status

Claims 13, 15, 18, 22, and 24-27 are pending.

Claim 14, 16, 17, 19, 20, 21 and 23 are cancelled without prejudice.

Claims 13, 15, 18, 22 and 24-27 stand rejected.

Amendment to the Title, Specification, Claims and Abstract

No new matter has been added. Amendments to the specification, claims and abstract were made to improve clarity, having taken the Examiner's objections and rejections into account. The title has been amended to correspond to the pending claims.

Objection to the Drawings

The drawings have been objected to because the features of Figs. 8 and 9 were deemed by the Examiner to be obscured. A corrected drawing sheet showing a clear version of both Figs. 8 and 9 is being provided in a separate paper marked "Replacement Sheet" and attached hereto.

Withdrawal of the objection to the drawings is therefore respectfully requested.

Objection to the Disclosure

The disclosure has been objected to for citing silicon as an example of a dielectric. The disclosure has been amended as a result of the above to exclude any references to silicon as an example of a dielectric. Withdrawal of the objection to the disclosure is therefore respectfully requested.

Attorney Docket No.: P12659

Rejections under 35 USC 101, and 112, first and second paragraphs

Claim 24 has been rejected under Section 101 and under the first and second paragraphs of Section 112 for citing silicon as an example of a dielectric. Claim 24 has been amended to exclude such a reference. Withdrawal of the rejections under Sections 101 and 112 is therefore respectfully requested.

Rejection under Section 102(b)

Claims 13-27 have been rejected under Section 102(b) as being clearly anticipated by Akram (6,124,634). Applicant traverses the above rejection for the reasons discussed in further detail below.

As is well-established, in order to successfully assert a *prima facie* case of anticipation, the Examiner must provide a single prior art document that includes every element and limitation of the claim or claims being rejected. Therefore, if even one element or limitation is missing from the cited document, the Examiner has not succeeded in making a prima facie case.

Akram et al. pertain to a microelectronic package configured to allow various routing configurations in flip-chip applications. In Akram et al., a silicon blank is laminated to the active surface of a die. For example, as seen in Fig. 2, a package 10 includes a die 12, and a silicon blank 20 placed over active surface 14 of the die. The silicon blank 20 includes apertures 22 therein into which solder paste is then stenciled and reflowed to create solder balls 38. The pattern of solder balls 38 corresponds to the pattern of bond pads of the active surface of the die to allow flip-chip direct die connect and direct die attach. Referring to Fig. 2a in Akram et al., a wafer-sized blank 320 includes apertures 22 aligned and laminated to a wafer 312 after passivation of wafer 312.

Akram et al. fail to disclose a microelectronic die package comprising a microelectronic die including a die substrate; a layer of dielectric mounted to the die substrate; and a thermally conductive material located between the die substrate and the layer of dielectric and defining thermal contact zones; where the package further

Attorney Docket No.: P12659

includes a heat dissipation device in thermal contact with the thermal contact zones to effect a dissipation of heat away from the die, as recited in independent claim 13.

Akram et al. further fail to disclose a microelectronic die comprising a die substrate; a layer of dielectric mounted to the die substrate; and a thermally conductive material located between the die substrate and the layer of dielectric and defining thermal contact zones adapted to be connected to a heat dissipation device to effect a dissipation of heat away from the die, as recited in independent claim 22.

Akram et al. additionally fail to disclose a microelectronic die package comprising a microelectronic die comprising: a die substrate; a layer of dielectric mounted to the die substrate; means located between the die substrate and the layer of dielectric for effecting a dissipation of heat away from the die, where the package further includes means in thermal contact with the means for effecting for directing heat away from the die through the means for effecting as recited in independent claim 25.

In Akram et al., there are no heat dissipation devices, no part of the die that is disclosed as being adapted to be connected to a heat dissipation device, and no means for directing heat away from the die, as recited in the independent claims of the instant application.

In view of the above, independent claims 13, 22 and 25 are patentable over Akram et al. under Section 102(b). In addition, dependent claims 15, 18, 24, 26 and 27 are likewise patentable over Akram for being dependent from claims 13, 22 and 25 as applicable, and further for the particular additional features that they recite.

Accordingly, the Examiner is respectfully requested to reconsider and withdraw his rejection of the claims under Section 102 (b).

Attorney Docket No.: P12659

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all currently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Response is respectfully requested,

Respectfully submitted,

Intel Corporation

Dated: May 16 2005

Laleh-Jatali Senior Attorney Intel Americas, Inc. Registration No. 40,031

(703) 633-0944

c/o Intel Americas, Inc. 4030 Lafayette Center Drive **Building LF3** Chantilly, VA 20151

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below

Datc: May 16, 2005